Appln No. 10/593,857 Amdt date October 23, 2008 Reply to Office action of June 23, 2008

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1. (Currently Amended) A plasma chamber comprising:
- a chamber body for defining a reaction space, capable of forming plasma, by a sidewall of the chamber body, a lower exterior wall of the chamber body, and an upper dome of the chamber body;
- a plasma source coil arranged on the dome, for including unit coils arranged to have a predetermined-turning number "n" calculated using a predetermined-value of n=a x (b/m) (where "a" and "b" are both positive integers, and "m" is indicative of the number of unit coils corresponding to an integer greater than "2"), allowing the unit coils to be extended from a center bushing which has a predetermined-radius at a center part, and allowing the unit coils to be spirally arranged along a circumference of the center bushing, such that the plasma is formed in the reaction space; and
- a cylindrical-shaped edge bushing which is arranged between the dome of the chamber body and the plasma source coil, and overlaps-for overlapping with an edge of [[the]] a wafer disposed in the reaction space.
- 2. (Original) The plasma chamber according to claim 1, wherein the edge bushing is formed of a ceramic or polymer-based material.
- 3-4. (Cancelled)
- 5. (Currently Amended) A plasma chamber comprising:
  a chamber body for limiting a size of a reaction space, capable of forming plasma, by a sidewall
  of the chamber body, a lower exterior wall of the chamber body, and an upper dome of the
  chamber body; and

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a plasma source coil arranged on the dome, for allowing a plurality of unit coils, having a plurality of turning numbers number, to be extended from a center bushing which has a predetermined radius at a center part, and allowing the unit coils to be spirally arranged along a circumference of the center bushing, in which, as the unit coils are arranged in a direction from a center part of a wafer to an edge of the wafer, a distance from the dome is gradually increased, such that the unit coils are arranged stepwise and the plasma is formed in the reaction space.

6. (Currently Amended) The plasma chamber according to claim 5, wherein the unit coils are arranged to have a predetermined the turning number "n" calculated using a predetermined value of n=a x (b/m) (where "a" and "b" are both positive integers, and "m" is indicative of the number of unit coils corresponding to an integer greater than "2").

7-12. (Cancelled)